

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [61 FR 18238 NO. 81 04/25/96]

[Docket No. 96-NM-75-AD; Amendment 39-9581; AD 96-09-07]

Airworthiness Directives; Boeing Model 757 Series Airplanes Equipped with Moog Spoiler Actuators

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD) that is applicable to Boeing Model 757 series airplanes equipped with certain Abex spoiler actuator electro-hydraulic servo valves (EHSV) installed in certain spoiler actuators. The existing AD currently requires a one-time inspection of the spoiler actuator to determine if a suspect EHSV is incorrectly installed, and replacement of the EHSV, if necessary. That amendment was prompted by reports that a bias spring in the EHSV of certain spoiler actuators was found to be incorrectly installed. The actions specified by that AD are intended to prevent a significant control upset of the airplane as a result of problems associated with an incorrectly installed EHSV in the spoiler actuator assembly. This amendment adds additional suspect EHSV's that require inspection; it also corrects the actuator manufacturer's name and corrects the serial number of one EHSV.

DATES: Effective May 10, 1996.

Comments for inclusion in the Rules Docket must be received on or before June 24, 1996.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 96-NM-75-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Information concerning this AD action may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Don Eiford, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington; telephone (206) 227-2788; fax (206) 227-1181.

SUPPLEMENTARY INFORMATION: On March 5, 1996, the FAA issued AD 96-06-01, amendment 39-9537 (61 FR 9607, March 11, 1996), which is applicable to Boeing Model 757 series airplanes equipped with certain electro hydraulic servo valves (EHSV) installed in certain spoiler actuators. That AD requires a one-time inspection of the EHSV on the spoiler actuator to determine if a suspect valve is incorrectly installed; if so, the EHSV must be replaced. That action was prompted by reports that a bias spring in the EHSV of certain spoiler actuators was found to be incorrectly installed.

If the jet pipe in the first stage of the EHSV is plugged, or if the differential pressure between the extend and retract ports pressurized by the jet pipe is inadequate, an incorrectly installed bias spring on the second stage spool would cause the spoiler to be driven into the "deploy" position. Such inadvertent spoiler deployment would result in the airplane experiencing a rolling moment. If the airplane is already banked or is at a low altitude, or if the crew does not respond rapidly enough to control the uncommanded roll, a significant control upset of the airplane could result. The actions required by AD 96-06-01 are intended to prevent the occurrence of such a control upset.

New Data Since Issuance of AD 96-06-01

Since the issuance of that AD, the manufacturer has provided the FAA with data indicating that additional suspect EHSV's may be installed on the affected airplanes. These suspect EHSV's have serial numbers of 595, 563, and 909. If any of these EHSV's are installed on an airplane, there is the potential for the occurrence of the same unsafe condition that was addressed by AD 96-06-01.

Explanation of New AD

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of this same type design, this AD supersedes AD 96-06-01 to require a one-time inspection of the spoiler actuator to determine if a suspect EHSV is incorrectly installed, and replacement of the EHSV, if necessary. This AD requires the inspection for and removal of three additional suspect EHSV's.

Additionally, action is taken throughout this AD to specify the correct names of the manufacturers of the spoiler actuator and the EHSV. The subject spoiler actuators are manufactured by Moog; the subject EHSV's are manufactured by Abex.

Table 1 of this AD has been corrected to indicate that the order numbers are "Abex" order numbers, rather than "Boeing" order numbers.

Due to a typographical error, EHSV serial number "559" was incorrectly listed in Table 1 of AD 96-06-01 as serial number "569." This AD corrects that error.

Cost Impact

According to the records of the EHSV manufacturer, all of the affected EHSV's were shipped to be installed on Model 757 series airplanes that currently are operated by non-U.S. operators under foreign registry. None of the Model 757 series airplanes affected by this action are on the U.S. Register; therefore, they are not directly affected by this AD action. However, the FAA considers that this rule is necessary to ensure that the unsafe condition is addressed in the event that:

1. any of the subject airplanes are imported and placed on the U.S. Register in the future;
- or
2. any one of the suspect EHSV's is installed on a U.S.-registered airplane in the future.

Should an affected airplane be placed on the U.S. Register in the future, it would require approximately 1 work hour to accomplish the required actions, at an average labor charge of \$60 per work hour. Based on these figures, the cost impact of this AD would be \$60 per airplane.

Conclusion

Since this AD action does not affect any airplane that is currently on the U.S. register, it has no adverse economic impact and imposes no additional burden on any person. Therefore, notice and public procedures hereon are unnecessary and the amendment may be made effective in less than 30 days after publication in the Federal Register .

Comments Invited

Although this action is in the form of a final rule and was not preceded by notice and opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 96-NM-75-AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is

contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 USC 106(g), 40113, 44701.

§ 39.13 - [Amended]

- 2 Section 39.13 is amended by removing amendment 39-9537 (61 FR 9607, March 11, 1996), and by adding a new airworthiness directive (AD), amendment 39-9581, to read as follows:

96-09-07 BOEING: Amendment 39-9581. Docket 96-NM-75-AD. Supersedes AD 96-06-01, Amendment 39-9537.

Applicability: Model 757 airplanes, certificated in any category, that are equipped with Moog spoiler actuators having Abex electro-hydraulic servo valves (EHSV), part number 72196, with the serial numbers listed in Table 1 of this AD:

TABLE 1

EHSV Serial Number	Abex Order No.*	Shipment Date*
AH-0001	C716657	08 November 1991
AH-0002	C716657	08 November 1991
AH-0003	C727995	25 August 1994
AH-0004	C727995	25 August 1994
AH-0005	C727995	25 August 1995
AH-0006	C727995	25 August 1995
AH-0007	C727995	25 August 1995
13	C731181	12 June 1995
49	C730878	01 June 1995
61	C727955	13 September 1994
131	C708905	13 November 1989
233	C727730	17 June 1994
241	C731540	13 September 1995
260	C727955	13 September 1994
279	C728298	02 September 1994
275	C727880	24 June 1994
308	C725421	01 December 1993
329	C727711	17 June 1994
347	C727518	14 June 1994
401	C728298	05 September 1994
407	C727730	17 June 1994
427	C731181	03 July 1995
450	C731181	03 July 1995
445	C706627	22 February 1989
457	C731663	12 September 1995
456	C728887	28 November 1994
463	C731435	21 August 1995
484	C727748	22 June 1994
515	C727745	24 June 1994
559	C728290	05 September 1994
563	C724224	14 September 1993
579	C724176	14 September 1993
595	C727735	24 January 1994
611	C727955	14 September 1994

607	C727997	20 July 1994
647	C728459	10 October 1994
726	C731096	04 September 1995
725	C729525	19 December 1994
819	C728135	03 August 1994
890	C726803	06 April 1994
874	C730890	26 April 1995
909	C724877	29 November 1993
912	C727977	04 August 1994
991	C713602	10 December 1990
998	C731477	04 September 1995
1022	C708905	13 November 1989
1023	C708905	13 November 1989
1072	C709166	14 November 1989
1148	C730192	13 March 1995
1175	C723278	05 August 1993
1227	C728303	31 August 1994
1283	C731833	04 September 1995
1487	C728549	04 October 1994
1655	C728442	28 November 1994
1780	C726757	06 April 1994
1807	C728669	29 September 1994
1862	C727625	17 June 1994
1929	C727977	04 August 1994
1986Z	C727730	17 June 1994
2017Z	C725411	24 November 1993
2034	C727730	17 June 1994
2073	C731272	12 September 1995
2125	C725713	12 January 1994
2220	C729735	29 March 1995
2334	C727730	17 June 1994
2348	C727730	17 June 1994
2426	C731623	12 July 1995

* The Abex Order Number and Shipment Date are included in this listing to enable operators to review their records in order to determine if a suspect EHSV has been ordered, and if, or where, it has been installed on an airplane.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent a significant control upset of the airplane due to problems associated with incorrectly assembled Abex electro-hydraulic servo valves (EHSV) on certain Moog spoiler actuators, accomplish the following:

(a) Within 6 months after the effective date of this AD, perform the following procedure:

(1) While the airplane is on the ground, extend the flaps to 40 degrees and visually inspect the spoiler actuator EHSV assembly to determine the location of the second stage bias spring end cap assembly.

(2) If the second stage bias spring cap assembly is on the aft or lower side of the EHSV assembly, prior to further flight, replace the EHSV, having Abex part number 72196, with a serviceable unit in accordance with the airplane maintenance manual.

NOTE 2: To be correctly positioned, the second stage bias spring cap assembly should be on the upper or forward side of the EHSV assembly. Appendix 1 of this AD provides a visual representation of the correct positioning of the EHSV assembly.

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

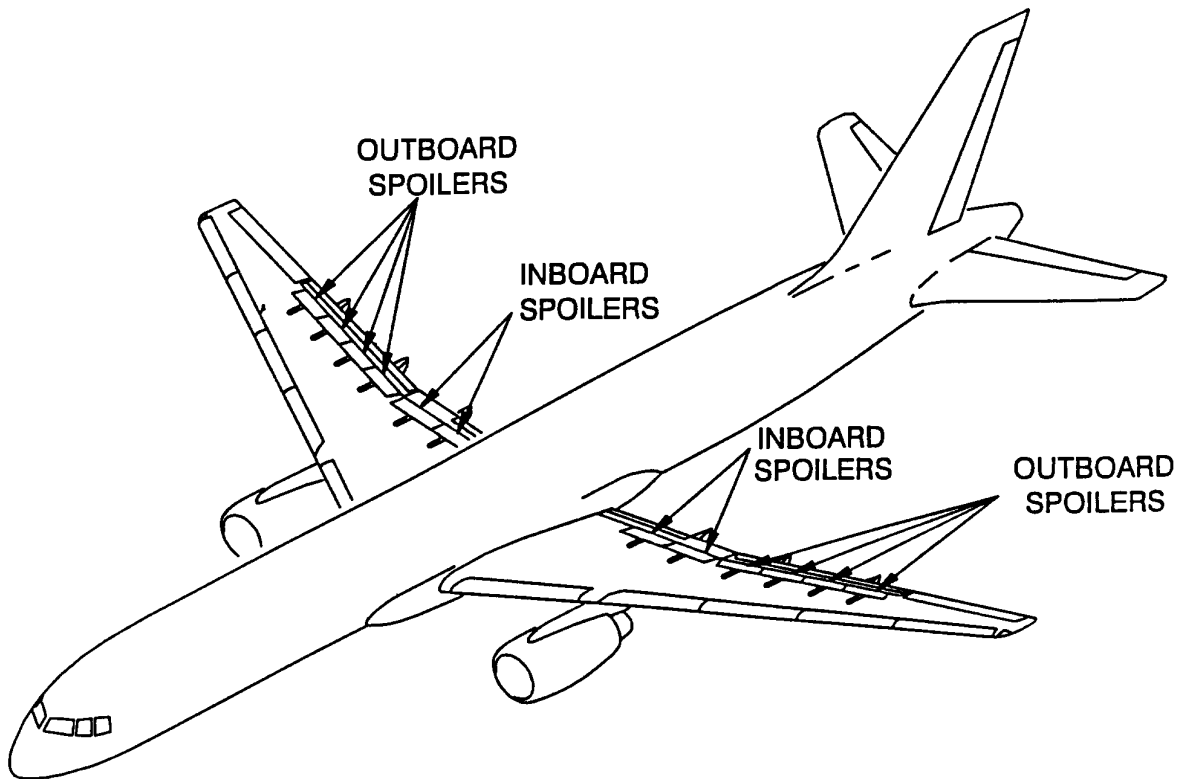
(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(d) This amendment becomes effective on May 10, 1996.

FOR FURTHER INFORMATION CONTACT: Don Eiford, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington; telephone (206) 227-2788; fax (206) 227-1181.

APPENDIX 1

757 SPOILER ACTUATOR INSTALLATION



SECOND STAGE SPRING END
CAP PROTRUSION SHOULD
NOT EXTEND ON THIS SIDE
(UNDERSIDE) OF THE EHSV

